

A FINE "CUP" STONE DISPLAY AT NOVEMBER ASO SHOW AND THE ENIGMA OF A COMMON OHIO ARTIFACT

by

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Two impressive examples of "cup stones" were part of an exhibit assembled by ASO members Steve Hill and Earnest Cook at the November ASO show in Columbus. Figures 1-5 show several views of the two sizable examples made of sandstone. Both of the stones are larger than typical field finds and both contained multiple "cups" or depressions. One stone has multiple depressions on both sides.

A common Ohio artifact, such stones are referred to by several names, sometimes called "cup stones," "pitted stones," "nutting stones," or "anvil stones" by field hunters and collectors.

Hill found these two examples in Gallia County, Ohio. The larger cup stone in figures 1-3 measures about 11 inches in length, 8 inches in width and about 4 inches thick. As can be seen in the photographs, it has multiple depressions on the obverse and reverse sides. The smaller stone measures 8 inches in length, 7 inches in width, and also has multiple depressions.

Hill, who lives in Gallipolis, notes that such stones are common in areas not far from the Ohio River on both the Ohio and West Virginia sides. In total, he estimates that he has found over 300 cup stones. He also noted that when hunting for such artifacts, he always turns large sandstone rocks over in the field, as most of the cup stones he has found had the side with the cups down.

Some examples are much too large to move. Included in his exhibit were photographs of some extraordinary large examples, such as the two pictured in figure 6 and 7. The stone in figure 6 contains 124 cups—marked by marbles to help them stand out in the photographs—and the boulder in figure 7 has 80.

Hill relates that among the many examples he has found—or located in the case of boulder-sized examples—the sizes of the depressions vary. Some have quite large, egg carton sized depressions, while other depressions are no wider than a pencil.

In *Ohio Stone Tools*, Robert Converse notes that cup stones have been found on Early Archaic sites, dating to 5000 B.C., establishing them "as one of the earliest forms of ground stone tools;" however, he also notes that they were in still in use in the Early Woodland Period. Converse also states that some examples, (like those pictured in the photographs) may be "completely covered with conical perforations which vary in size."

Cup stones were noted in many early writings on American and Ohio archaeology. Often lists of material found in mounds include one or more cup stones among the tally of objects unearthed. For example, Gerald Folke's 1902 book *Archaeological History of Ohio: the Mound Builders and Later Indians* describes the great numbers of cup stones that were found in Ohio:

They occur in all parts of the world and are surpassed in numbers among the larger stone objects only pitted stones and hammers. Over the eastern half of the United States they are found by thousands, in all sorts of situation, not only on village sites, but in mounds and cairns where they are apparently thrown in as part of the component material, like any other stones... Near Chillicothe, on point over looking Paint Creek valley, several large irregular blocks of sandstone are firmly imbedded in the earth; each has one or more cups on its exposed surface. (p. 540)

Folke also cited sources that noted large examples similar to the boulder photographed by Hill:

Two miles below Pittsburg are the remains of two Indian villages about one mile apart. The great number of cupped or pitted stones found there has been remarkable. They are principally water worn boulders taken from the river, measuring from six to 18 inches in diameter; besides several large, fixed boulders containing ten to fifteen cups on them, averaging half the size of a hen's egg. (p. 540)

The use of cup stones remains an enigma. Speculation on their use can be found in many early sources—as well as on more recent studies. Folke includes many ideas on the use of cup stones—smashing nuts, fire starting, for spinning yarn, grinding sticks into a convex shape—but concedes no real explanation. Converse relates that it has been suggested they were used to hold nuts for cracking, but also notes "it is possible that they were used as sockets for a bow drill or fire maker." Hill speculated that the size difference in the depressions makes him believe they might be used repeatedly, starting out small and then getting larger with use. He believes that the stones were used to start fires. A study of Native American cup stones, by Adam Brooke Davis offers similar suggestions on their use. Davis argues that because many such stones are found "frequently near streams and rock-shelters,"

suggests "a possible link to hunting, or with the combined activities of a seasonal hunting/gathering camp." He also relates similar possible uses, including that they "served as the base-socket for the fire-drill, with tinder piled around the rotating shaft."

Curiously, as Folke noted—cup stones are found in many areas of Europe as well, along with much speculation on their use. One study of pitted river boulders in Northern Europe by Andreas Tvaari dates many examples to the Bronze Age, and speculates that some may have been hollows for offerings, while others, especially those on the sloping sides of boulders could not be explained in this way. He reviews a number of attempts to explain the origins of cup marked boulders in Europe, including cup marks as directional markers, as markers for cultivated areas, as way to mark years, and as a component of petroglyphs.

It may also be the case that some cup stones had multiple purposes, and that those boulders—sized objects had a different use from the typical field find. As Folke noted long ago: "No theory yet advanced, however, will account for the boulder of sandstone weighing at least half a ton, found near Ironton, which contains more than 100 cups scattered all over it." (p.545)

Sources

Andreas Tvaari, "Cup Marked Stones in Estonia," *Electronic Journal of Folklore*, Issue 11, 1999, pp. 113-139 www.ceeol.com

Gerald Folke, *Archaeological History of Ohio: the Mound Builders and Later Indians*, Ohio State Archaeological and Historical Society: 1902

Robert Converse, *Ohio Stone Tools*, Archaeological Society of Ohio, 2000

Adam Brooke Davis, "Cupstones of Adair County, MO" <http://missourifolklore.societiy.truman.edu/cUstones.htm>



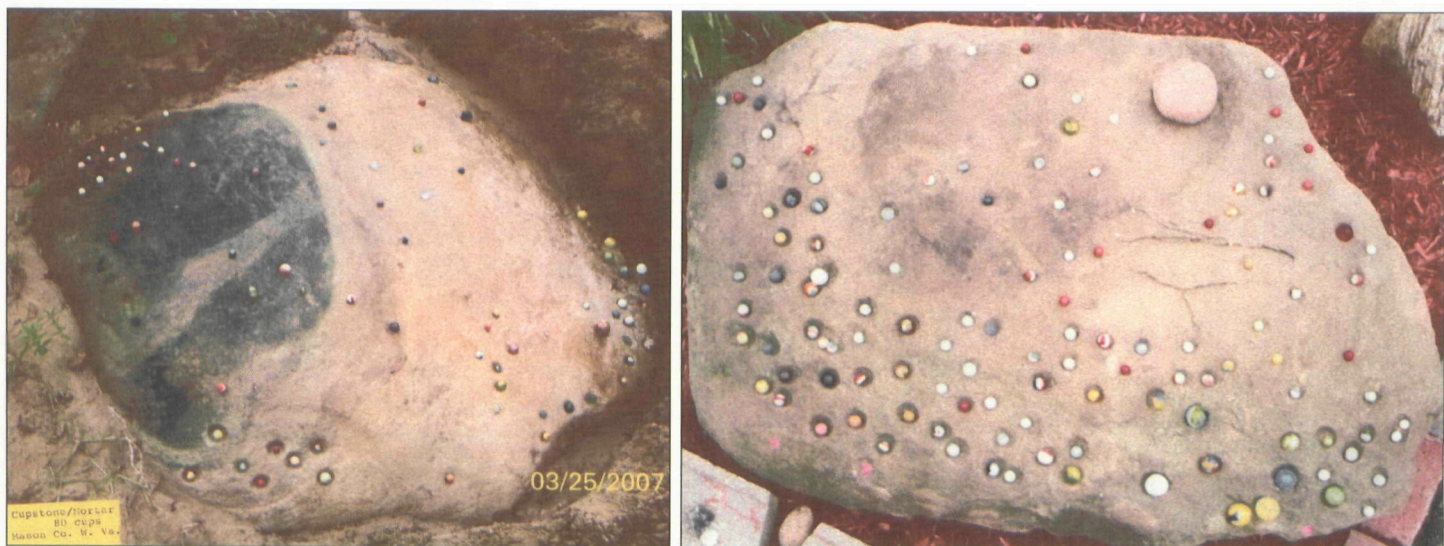
Steve Hill and Earnest Cook with their display.



Figure 1, 2, 3 (Rusnak) Cupstones from southern Ohio.



Figures 4,5 (Rusnak) Large cupstones.



Figures 6,7 (Rusnak) Photos of Ohio River cupstones with their cups marked by marbles.